

INCIDENCE AND PREDICTORS OF STENT THROMBOSIS UP TO 7 YEARS FOLLOW-UP FOLLOWING DRUG-ELUTING STENT IMPLANTATION IN UNSELECTED PATIENTS WITH COMPLEX CORONARY LESIONS TREATED IN THE REAL-WORLD CLINICAL PRACTICE - A SUBANALYSIS FROM THE DRUG-ELUTING STENT IN THE REAL WORLD "DESIRE" REGISTRY

i2 Poster Contributions

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Background: Despite the marked efficacy demonstrated by drug-eluting stents (DES) in reducing neointimal proliferation, and therefore, the need for vessel revascularization, persistent concerns regarding long-term safety, especially in more complex subset, are still.

Methods: The DESIRE Registry is a large, prospective, non-randomized, single center study assessing the late outcomes of unselected pts treated with DES. Overall, 3,157 pts were consecutively enrolled from May/02-Jun/09. Clinical follow-up (FU) (98.5%) was performed yearly up to 7 yrs (median 3.4 yrs). Stent thrombosis (ST) was defined according to the ARC.

Results: Mean age was 64 yrs, 29% had diabetes, 31% current smokers, 42% presented with ACS (16% recent myocardial infarction, MI), and the majority of lesions were highly complex (66% type B2/C). Overall, there were 4,647 lesions treated with 5,029 DES, and angiographic success was 99%. During the FU period, there were 49 ST (1.6% overall incidence), 67% (33/49) were classified as definite ST, and 41% (20/49) occurred between 1-12 months. The Kaplan-Meier probability of ST-free survival up to 7 yrs was 97.3%. Independent predictors of ST are shown in the Table.

Conclusions: In this study, 97.3% of pts were free from ST up to 7 yrs FU. Overall, the majority of ST was classified as definite (ARC) and occurred between 1-12 months. Also, ST was significantly associated to: percutaneous intervention in the setting of recent MI, current smoking, lesion complexity, and stent underexpansion.

Variable	Hazard Ratio	95% Confidence Interval	P value
Recent MI (<30 days)	2.96	1.62 - 5.41	<0.001
Current smoking	2.52	1.13 - 4.48	0.021
Diabetes mellitus	1.69	0.94 - 3.04	0.081
Eccentric	2.78	1.38 - 5.62	0.004
Calcium (moderate/severe)	2.71	1.33 - 5.54	0.006
Residual stenosis (per % unit increase)	1.06	1.03 - 1.09	<0.001